

Abstract

Module for cooling the charge air and recirculated exhaust gases of an internal combustion engine of a motor vehicle

The cooling module consists of a charge air cooler and of a recirculated exhaust gas cooler. The charge air cooler comprises a heat exchange bundle (2), an inlet header box for the air that is to be cooled and an outlet header box for the cooled air. The recirculated exhaust gas cooler comprises a heat exchange bundle (4) for cooling the recirculated exhaust gases, an inlet header box for the recirculated exhaust gases and an outlet header box for these gases. A wrapper consisting of two half-casings (7 and 8) accommodates the exchange bundles (2 and 4). The charge air cooler heat exchange bundle (2) and the recirculated exhaust gas cooler heat exchange bundle (4) are assembled in a single brazing operation. They are also assembled with one another during this same brazing operation, possibly at the same time as the two half-casings (7 and 8).

(Figure 2)